

REMARKS

Claims 17 to 32 are pending in the application.

Drawings

The examiner has requested new drawings in compliance with 37 CFR 1.121(d) because the current drawings have blurred lines and hand-drawn numerals.

It is respectfully submitted that according to MPEP 608.02(b) I. INFORMAL DRAWINGS (emphasis added)

“The Office no longer considers drawings as formal or informal. Drawings are either acceptable or not acceptable. Drawings will be accepted by the Office of Initial Patent Examination (OIPE) if the drawings are readable and reproducible for publication purposes. See MPEP § 507.

*Examiners should review the **drawings for disclosure of the claimed invention and for proper use of reference numerals**. Unless applicant is otherwise notified in an Office action, objections to the drawings in a utility or plant application will not be held in abeyance. A request to hold objections to the drawings in abeyance will not be considered a bona fide attempt to advance the application to final action (37 CFR 1.135(c)). Drawing corrections should be made promptly before allowance of the application in order to avoid delays in issuance of the application as a patent or a reduction to any term adjustment. See 37 CFR 1.704(c)(10).”*

The OIPE has accepted the drawings; the application has been published (US 2005-0224522-A1 on 10/13/2005). Therefore, the drawings are proper for examination purposes and “formal drawings” to comply with 37 CFR 1.84 (i.e., compliance with formalities) should not be requested during examination but required at the time a notice of allowance is mailed; see 37 CFR 1.85(c):

“(c) If a corrected drawing is required or if a drawing does not comply with §§ 1.84 at the time an application is allowed, the Office may notify the applicant and set a three-month period of time from the mail date of the notice of allowability within which the applicant must file a corrected drawing in compliance with §§ 1.84 to avoid abandonment. This time period is not extendable under §§ 1.136 (a) or §§1.136 (b).”

Therefore, as there are no issues in regard to the contents of the drawings and only issues in regard to 37 CFR 1.84, new drawings in compliance with 37 CFR 1.84 are not submitted at this time.

Specification

The spelling error pointed out by the examiner has been corrected.

Claim Objections

The claims are objected to because in claim 17 the phrase "form of rotatable" appears to be wrong. The wording has been corrected as suggested.

Rejection under 35 U.S.C. 102

Claims 17-32 stand rejected under 35 U.S.C. 102(b) as being anticipated by *DE 43 28 742 (Walter)*.

The examiner states that the reference shows a metering cylinder/chamber 6; a valve cylinder 3; a metering piston 5; a mouth piece 7; an opening 13; a valve piston 1; a support plate 17; multiple channels 9, 10; and remaining structures as shown in Figs. 1-5.

The metering device for flowable products according to the invention has:

- a) a metering cylinder (6);
- b) a valve cylinder (7) coaxially arranged in the metering cylinder (6);
- c) the valve cylinder (7) connected with its upper end to a product reservoir (3);
- d) **an annular chamber (9) defined between the metering cylinder (6) and the valve cylinder (7);**
- e) **a ring-shaped metering piston (8) arranged in the annular chamber (9)** to be moveable between an upper intake position and a lower dispensing position;
- f) **the metering piston (8) dividing the annular chamber (9) into an upper part and a lower part**, wherein the upper part is configured to be connected to the product reservoir (3) and the **lower part forms a metering chamber (11);**
- g) a mouthpiece (13) closing a bottom side of the metering chamber (11) and having a coaxial cylindrical dispensing opening (12);
- h) a central valve piston (15) movable into operating positions releasing or closing the annular chamber (11);
- i) the valve cylinder (7) and the valve piston (15) form a rotatable control unit (7, 15);
- j) the rotatable control unit (7, 15) has a first rotary position for connecting the metering chamber (11) to a supply channel (18) in the valve cylinder (7);
- k) the rotatable control unit (7, 15) has a second rotary position for connecting

the metering chamber (11) to at least one outlet channel (16) provided in the valve piston (15).

DE 43 28 742 shows in Fig. 1 a metering chamber 6 and a piston 5 and parallel to this arrangement a chamber 3 into which the material to be filled into containers is supplied through the supply line 2. The chamber 3 and the metering chamber 6 are connected by conduit 4. A rotary slide 1, 1' is arranged inside cylinder 8 underneath the chamber 3. The slide 1, 1' has an axial channel 9 and an axial channel 10 (see Figs. 1 and 2). The channel 9 extends from the chamber 3 to the level of the conduit 4; the channel 10 extends from the level of the conduit 4 to the outlet at the mouthpiece 7.

The device functions as follows: the chamber 3 is filled with the material to be dispensed (being fed in through the supply 2). When the piston 5 in the metering chamber 6 is moved upwardly, the material from the chamber 3 is sucked into the metering chamber 6 through channel 9 communicating with conduit 4 in a first position of the slide 1, 1'. Upon completion of the upward stroke, the slide 1, 1' is rotated 180 degrees so that the channel 9 is rotated away from the conduit 4 and the channel 10 is rotated into the position shown in Figs. 1 and 2 and is now in communication with conduit 4. The piston is now moved downwardly, and the material in the metering chamber 6 is forced through conduit 4 and channel 10 and passages 12, 13, 14 into a container positioned at the mouthpiece 7.

Thus, there are two parallel chambers and a metering piston that is arranged in the chamber 6 that is parallel to and adjacent to the chamber 3; chamber 3 is connected to the reservoir through supply 2. The features a) through f) of claim 17 are not fulfilled by the prior art arrangement: the claim language of claim 17 sets forth that the valve cylinder is coaxially arranged in the metering cylinder and is connected with its upper end to a product reservoir and further that a ring-shaped metering piston is arranged in the annular chamber between the inner valve cylinder and the metering cylinder. The ring-shaped piston is moveable between an upper intake position and a lower dispensing position; it divides the annular chamber into an upper part and a lower part, wherein the upper part is connected the product reservoir and the lower part forms a metering chamber.

The metering piston 5 of *DE 43 28 742* is not ring-shaped; it is not arranged in an annular chamber defined between an outer metering cylinder and an inner valve cylinder; there is no annular chamber that is divided by the ring-shaped metering piston into an

upper part and a lower part where the lower part is the metering chamber. Moreover, *DE 43 28 742* has no coaxial dispensing opening arranged at the metering chamber as required by feature g) of claim 17. The metering chamber 6 is completely closed off at the bottom and the dispensing opening 12, 13 is arranged underneath chamber 6; the dispensing opening is not even coaxial to the chamber 6 as it is laterally displaced relative to the center axis of the chamber 6 indicated by dashed lines.

DE 43 28 742 does not anticipate or make obvious the structure claimed in claim 17. Reconsideration and withdrawal of the rejection of the claims 17 to 32 pursuant to 35 USC 102 are therefore respectfully requested.

CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or **e-mail** from the examiner to discuss appropriate amendments to place the application into condition for allowance.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on May 15, 2007,

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